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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/21/2003

Matthew T. Adams

13563

4028

7590

06/01/2006

ORUM & ROTH
53 W. JACKSON BLVD
CHICAGO, IL 60604

EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,941

Applicant(s)

ADAMS, MATTHEW

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The Examiner acknowledges Applicant's election of Group 1, Claims 1 - 11 without traverse.

The Examiner acknowledges cancellation of claims 12-20.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 11, 24, and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. The instant specification does not describe with enough specificity to detail how a light-colored ink has sufficient opacity to obscure a dark colored layer (see instant specification, pg. 4, lines 14-18 and pg. 5, lines 14-18, e.g. white or light colored ink). Thus, if the ink is white color, it is nearly impossible to obscure a dark color. It is not clear what compositions are employed to make this happen.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1, 4, 6, 11, 24, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

To claim 1, it is not clear if there is present a resin coating because of the recitation of “carrier becomes one of translucent or transparent when coated with a resin material”. If x then y is suggestive language and does not limit the claim.

To claims 4 and 6, “the label” lacks antecedent basis. Further the overall structure of claim 4 is unclear as to where the resin material is in relation to the embedded label. Also the structure is unclear in claim 6 as it is not clear how a label becomes integral with a composite material, there is no relation to a surface it is on.

To claims 11, 24, and 28, it is not clear to what degree of sufficient opacity of a light color is enough to obscure a dark color.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by 6,210,776 to Hill.

Hill teaches media for use with a composite material comprising (4:10-30, see multi-layer assembly and 15:16-50, e.g. advertisements and road traffic signs overprinted with ink): a carrier

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(14, FIGS. 9B-9C and associated text, see substrate) with printed ink indicia (15:45-46), said ink indicia comprised of a first layer of a first light ink (11, FIGS. 9B-9C and associated text) and second layer of a second dark ink (13, FIGS. 9B-9C and associated text), and wherein the carrier is translucent or transparent resin material such as pvc or polyester (9:55-68, 10:40-45) per instant claim 1 (4:10-30). What happens when coated with a resin material is not a positive recitation as it could or could not happen. Claims 1 and 8 are met.

7. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by 6,089,614 to Howland et al.

Howland teaches media for use with a composite material comprising (FIGS. 1-4): a carrier (1, FIGS. 1-4 and associated text, see substrate) with printed ink indicia (7,9), said ink indicia comprised of a first layer of a first light ink (7, FIGS. 1-4 and associated text) and second layer of a second dark ink (8, FIGS. 1-4 and associated text), and wherein the carrier is translucent or transparent resin material (2:64-65) per instant claim 1. What happens when coated with a resin material is not a positive recitation as it could or could not happen. Claims 1 and 8 are met.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1-2, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,683,784 to Nakao et al.

Nakao teaches media for use with a composite material comprising: a carrier mesh (1:20-45, Example 1, see substrate of fibers having wrap and weft dimensions) with printed ink (4:50-55), said ink indicia comprised of a first layer of a first light ink and second layer of a second dark ink (4:50-55, see yellow, magenta, cyan, and black inks through the printer), and wherein the carrier is translucent or transparent due to a coating of translucent resin material of heat curable epoxy acrylate resin, and the porosity mesh of the carrier, and/or the impregnating of a coating liquid of resins (3:30-50) per instant claims 1, 2, 5, and 8 are met. Nakao does not teach indicia per se, but does teach the record printing via ink jet is for advertising signs (5:20-25), which would have been obvious to one having ordinary skill in the art to imply indicia.

Claims 3-7, 9-10, 21-23, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,683,784 to Nakao et al. in view of USPN 5,494,735 to Nitta.

Nakao essentially teaches the claimed invention above.

Nakao does not teach a woven mesh having a thread count between 180 and 560 threads per inch per instant claims 3 and 7.

Nitta teaches a fabric mesh substrate recording having a thread count of wrap threads up to 150 and weft threads up to 150, equaling 300 and may add 1 or 2 warp or weft threads for reinforcement (3:1-33, 4:1-25), thus meeting the thread count of Applicant's range of 180-560.

It would have been obvious to one having ordinary skill in the art to use a thread count as claimed because Nitta teaches a fabric mesh substrate recording having a thread count of wrap

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threads up to 150 and weft threads up to 150, equaling 300 and may add 1 or 2 warp or weft threads for reinforcement (3:1-33, 4:1-25).

Regarding claims 4 and 6, while Nakao nor Nitta teach a label embedded or intergal with a composite as recited, and it is unclear what the structure is, the Examiner interprets the claim to mean a label on the surface of a composite material and a carrier coated with resin.

Nitta teaches a multilayer paper (B, FIG. 1 and associated text) of primer coat and films of resin secured to a substrate carrier via adhesive resin (S, FIG. 1 and associated text), where together the composite is a functional equivalent of a label and used for recording purposes. The inner layers of B are considered embedded. That a label becomes integral after resin has cured is a process limitation in a product claim and is afforded little patentable weight. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. In re Bridgeford, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. In re Brown, 459 F. 2d 531. The same process and materials of the instant product are provided by the prior art, and are hence considered equivalent.

It would have been obvious to one having ordinary skill in the art to have modified Nakao to include a label as recited because Nitta teaches a multilayer paper and film of resin secured to a substrate carrier via adhesive resin, where together the composite is a functional equivalent of a label and used for recording purposes (see FIG. 1 and associated text).

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As previously set forth, Nakao already teaches dark and light colored inks per instant claims 21, 25, and 29. To instant claims 9-10, 22-23, and 26-27, Nakao does not teach a light-colored composite and carrier contacts a composite or a black ink contacts the composite.

However, Nitta teaches a composite (FIG. 1) and carrier come in contact via adhesive and the paper having calcium carbonate (6:15-16) that is a light color and clay or earth that is dark, which is a conventional suitable construction for recording purposes effecting printability. Nitta shows ink (9, FIG. 2 and associated text) on the composite (1, FIG. 2) and the ink can be printed on either side of the composite on its paper or woven fabric side (7:20-35) and of colors black, blue, red and yellow (11:1-5).

It would have been obvious to one having ordinary skill in the art to have modified Nakao to include a light-colored composite, and carrier and dark ink contacts a composite because Nitta teaches a composite and carrier come in contact via adhesive and the paper having calcium carbonate that is a light color or clay or earth that is dark, and incorporates dark ink as it is a conventional suitable constructions for recording purposes effecting printability (Abstract, FIG. 1, 5:1-25, 6:15-30, 7:20-35, and 11:1-5).

Nakao does not teach *per se* a light-colored ink layer has sufficient opacity to obscure a dark colored ink layer and composite as per instant claims 11, 24, and 28. However, Nakao teaches the same ink material colors and Nitta teaches the same composite, thus in combination, one having ordinary skill in the art would expect the same phenomena to occur, absent evidence to the contrary.

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Claims 11, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,683,784 to Nakao et al. in view of USPN 5,494,735 to Nitta in view of USPN 6,210,777 to Vermeulen et al.

The combination of Nakao and Nitta is relied upon above.

The combination does not teach a light-colored ink having sufficient opacity to obscure the dark-colored ink layer and composite.

Vermeulen teaches a variety of light interference and metallic printing ink used to obscure print on transparent documents (4:1-35, 5:1-68, 6:35-65, 10:15-68, FIGS. 1-4) to prevent copying.

It would have been obvious to one having ordinary skill in the art to have modified the combination to include light interference or metallic pigments/inks to obscure print or substrates because Vermeulen teaches a variety of light interference and metallic printing ink used to obscure print on transparent documents to prevent copying and counterfeiting (4:1-35, 5:1-68, 6:35-65, 10:15-68, FIGS. 1-4).

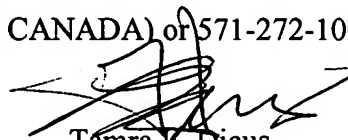
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tamra L. Dicus
Examiner
Art Unit 1774

May 28, 2006



RENA DYE
SUPERVISORY PATENT EXAMINER

A.U. 1774 5/30/06